



***Montana Department of
Transportation
Information Services Division***

[Enter Project Name]
Work Request Id: [Enter ID number]

Requirements Document

Prepared By: [Enter document preparer name]
Information Services Division

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Introduction

The Introduction section provides for an executive level overview.

Project Overview

[Describe the purpose and anticipated business benefits of the project as it relates to the purpose of the system or application.]

Scope

[Provide a brief description of the scope of the project]

References

[Identify sources of information used to develop this document.]

Outstanding Issues

[Enter A list of issues or problems that are known to be outstanding with this revision.]

Current Business Functions

[Provide a high-level picture of the processes and procedures by which information is currently handled by the owner/customer in the area being automated or modified. The timing of critical processes should also be discussed, e.g., if there are any processes dependent on other processes being previously completed, these dependencies should be noted. For example, if time sheets are due on the 15th of the month, and there is an audit step to ensure all time sheets have been keyed prior to running a system job that cuts the checks, the audit step must be run after the 15th and prior to the system job being run. In the Appendix, provide a functional hierarchy diagram.]

Current Deficiencies

[This subsection portrays any problems experienced by the owner/customer with the current process.]

Requirements

This section states the functions required of the software in quantitative and qualitative terms, and what the system must do to completely fulfill the owner/customer's expectations. The requirements should answer the following questions:

- X *How are inputs transformed into outputs?*
- X *Who initiates and receives specific information?*
- X *What information must be available for each function to be performed?*

Each paragraph (or group of paragraphs) should contain a reference identifying the source of the requirement. Each requirement (sentence or paragraph) should be numbered, using a numbering scheme that allows for inserting additional requirements later, e.g., FUNC-01, or A-1.1, etc. Only one requirement should be defined per numbered item.

Each requirement should be classified as one of the following:

- | | |
|--------------------|--|
| <i>1 Mandatory</i> | <i>Absolutely essential feature; project will be canceled if not included</i> |
| <i>2 Required</i> | <i>Individual features are not essential, but together they affect the viability of the project.</i> |
| <i>3 Desired</i> | <i>Nice-to-have feature; one or more of these features could be omitted without affecting the project viability.</i> |

Goals

[Provide a clear list of the expectations of a new system or function(s), both in terms of what must be improved and what must be retained from the current processes. All detailed requirements should address one or more of these goals.]

| # | Priority | Requirement Description |
|------|-----------|--|
| G-01 | [M, R, D] | [Enter goal. One goal per numbered line. |
| G-02 | | |

Input & Output Requirements

[Provide a description of all manual and automated input requirements for the software product such as data entry from source documents and data extracts from other applications, as well as all output requirements for the software product such as printed forms, reports, display screens, files and other deliverables the system will process and produce.]

| # | Priority | Requirement Description |
|-------|-----------|---|
| IO-01 | [M, R, D] | [Enter requirement. One requirement per numbered line.] |
| IO-02 | | |

Data Requirements

[Identify the data elements and logical data groupings that will be stored and processed by the software product. Include archiving data requirements and sensitivity of data.

A data model and accompanying data dictionary should be included in an appendix.]

| # | Priority | Requirement Description |
|------|-----------|---|
| D-01 | [M, R, D] | [Enter requirement. One requirement per numbered line.] |
| D-02 | | |

Functional Requirements

[Delineate, at a detailed level, computer system requirements within the context of the processes they must support. A process model supports this, which may be included.]

| # | Priority | Requirement Description |
|------|-----------|---|
| F-01 | [M, R, D] | [Enter requirement. One requirement per numbered line.] |
| F-02 | | |

Performance/Quality Requirements

[Portray owner/customer defined standards for system operations, relating to hours of operations, system response time, volumes, growth, and reliability.]

Performance requirements define how the software product must function (e.g., hours of operation, response times, and throughput under various load conditions). The information gathered in defining the project objectives can translate into very specific performance requirements; (e.g., if work performed for an organization is mission essential to the Department, the hours of operation and throughput will be critical to meeting the mission). Also, government policy can dictate specific availability and response times.]

| # | Priority | Requirement Description |
|------|-----------|---|
| P-01 | [M, R, D] | [Enter requirement. One requirement per numbered line.] |
| P-02 | | |

Security and Access Requirements

[Provide details of the security classification of the data handled by the system, special handling required for the data, and the types and levels of protection and control required for customer access to the data. This section should also details telecommunications security aspects, e.g., workstation/server, network, system, dial-up access, etc.]

| # | Priority | Requirement Description |
|------|-----------|---|
| S-01 | [M, R, D] | [Enter requirement. One requirement per numbered line.] |
| S-02 | | |

Communication Requirements

[The communication requirements define connectivity and access requirements within and between customer locations and between other groups and applications.]

| # | Priority | Requirement Description |
|-------|-----------|---|
| CM-01 | [M, R, D] | [Enter requirement. One requirement per numbered line.] |
| CM-02 | | |

Backup and Recovery Requirements

[Provide details of back up and recovery requirements. If software is identified as mission essential a continuity of operations plan must be developed.]

| # | Priority | Requirement Description |
|-------|-----------|---|
| BR-01 | [M, R, D] | [Enter requirement. One requirement per numbered line.] |
| BR-02 | | |

Training Requirements

[Define training requirements for this process. This should cover Initial training and ongoing training.]

| # | Priority | Requirement Description |
|-------|-----------|---|
| TR-01 | [M, R, D] | [Enter requirement. One requirement per numbered line.] |
| TR-02 | | |

Ongoing Maintenance and Support Requirements

[Define ongoing maintenance and support requirements for this application. This establishes the high level expectations of the user and provides information for a service level agreement.]

| # | Priority | Requirement Description |
|-------|-----------|---|
| MS-01 | [M, R, D] | [Enter requirement. One requirement per numbered line.] |
| MS-02 | | |

Appendix A - Business Data Model

Data entities, relationships and data elements to support the core business processes and requirements are defined below.

This information provides the technical details to enable the system design team to determine how and where the system's data will be stored, the dependencies between the data, how the business rules will be implemented, etc.

Data Models

The diagrams in Appendix C illustrate the major data entities and relationships involved in the core business processes of the system.

1. [ENTER DIAGRAM NAME]

Diagram C-1 depicts the data necessary [Describe the business purpose of the data as it relates to the system or application.]

2. [ENTER DIAGRAM NAME]

Diagram C-2 depicts the data necessary [Describe the business purpose of the data as it relates to the system or application.]

Data Entity Descriptions

The following table describes the system's major data entities.

[Note: If using Designer, a customized repository query may be used to load this table. See documentation at:

..\Mdt\Std\Sys\Doc\Reposit_Sql

Remove this note from completed document.]

| Entity Name | Entity Description |
|---------------------|-----------------------------|
| [ENTER ENTITY NAME] | [Enter entity description.] |
| | |

Data Entity Relationships

The relationships between the system's major data entities are described in the following table.

[Note: If using Designer, a customized repository query may be used to load this table. See documentation at:

..\Mdt\Std\Sys\Doc\Reposit_Sql

Remove this note from completed document.]

| |
|-----------------------------------|
| [Enter relationship description.] |
| |

Data Element Descriptions

The following table identifies the major data elements to support the core business requirements of the system.

[Note: If using Designer, a customized repository query may be used to load this table. See documentation at:

..\Mdt\Std\Sys\Doc\Reposit_Sql

Remove this note from completed document.]

| Data Element Name | Attributes | Data Element Description |
|---------------------------|----------------------------|-----------------------------------|
| [ENTER DATA ELEMENT NAME] | [ENTER DATA TYPE & LENGTH] | [Enter data element description.] |
| | | |

Document Approval/Sign-off

The following agree that the business requirements for the [Enter system or application name] as defined in this document are complete and correct, and authorize the project team to proceed with the detailed design of the system.

Project Sponsor

Date

Project Manager

Date

Technical Manager

Date

Project Lead

Date